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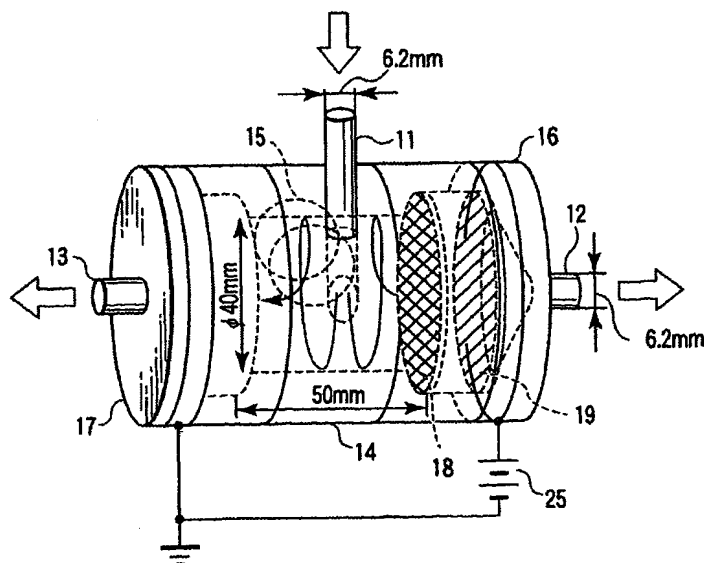
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(54) Title: APPARATUS FOR SEPARATING GAS INTO GAS COMPONENTS USING IONIZATION



(57) **Abstract:** In an apparatus for ionizing and separating a gas into gas components in an inlet gas (11), a gas flowing into a flow channel of a chamber from an inlet port is ionized, and in the flow channel the gas ionized by applying an electrical field to the gas components having an ionized state by electrodes (16) (17) is separated into a cation and anion to separate a gas molecule component contained in the gas. One of the gas component such as a clean air is removed from a first outlet (12) port and the separated gas component is removed from a second outlet (13) port. A flow of the inlet gas from the inlet port is adjusted to retain the gas in the flow channel of the chamber for a predetermined or more time so that an airflow is adjusted.

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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B01D B03C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 3 154 682 A (HARTZ NELSON W ET AL) 27 October 1964 (1964-10-27) column 1, line 9 - line 15 column 1, line 59 - column 3, line 2; figure	1-16
X	PATENT ABSTRACTS OF JAPAN vol. 016, no. 180 (C-0935), 30 April 1992 (1992-04-30) -& JP 04 022416 A (EBARA CORP), 27 January 1992 (1992-01-27) abstract	1-3, 7



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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 20, 10 July 2001 (2001-07-10) & JP 2001 070743 A (DAI-DAN CO LTD), 21 March 2001 (2001-03-21) cited in the application abstract ---	1-16
A	US 5 961 693 A (EASOM BRUCE H ET AL) 5 October 1999 (1999-10-05) the whole document ---	1-16
A	PATENT ABSTRACTS OF JAPAN vol. 1998, no. 01, 30 January 1998 (1998-01-30) & JP 09 248417 A (NIPPON A P I:KK), 22 September 1997 (1997-09-22) abstract -----	1

INTERNATIONAL SEARCH REPORT

Information on patent family members

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